From the Editor's Desk....

The incredible shrinking newsletter. Yes, that's right. In an effort to finally get the weight down to one ounce, this issue is being trimmed another quarter inch. This will result in a mailing cost of 20 cents per issue. Of course, you can help defray the mailing expense, by coming to the monthly meeting and picking up your copy of the newsletter in person.

Thanksgiving is just around the corner - time to give thanks - so I would like to catch up on my thank yous. The first big thank you goes out to all those JACG members that have contributed to this newsletter. Without contributions from the members this newsletter would not exist. So far, the amount of submissions has been adequate - not great or earth-shattering - but adequate. Therefore I make my monthly appeal to all JACG members - keep those cards and letters coming.

For most of the articles, programs and reviews that I publish in this paper, credit is given to the author. Sometimes credit is not given where credit is due. For example, the helpful hints concerning friction printers, Epson printer users, Text Wizard and adding another TV to your Atari that appeared in the October issue were contributed by Graham Van Slyke.

Kudos for the officers: Dick Kushner, Dennis Kushler, Don Ursem, Ed Picciuti, Herb Lehner, Greg Panza, and Rick Olson. The behind-the-scenes activities of these individuals ensure that the Jersey Atari Computer Group continues to be one of the top Atari user groups in the country.

I would also like to thank the advertisers who appear in this newsletter for their support of our users group and for their continuing support of the Atari computer.

There is another person that deserves credit for action above and beyond the call of duty. This person takes care of most of the errands that are required to get this newsletter out on time and, more importantly, acts as consultant, as morale-booster, and as editor to the editor. With experience in writing, editing and management, it is none other than Jean Backes, my wife. And don't call her chief!

I am planning a special 20-page December issue which will be overflowing with special features, programs, reviews and a few surprises. If you have any holiday-related material that you would like to share with the members, get it to me as soon as possible before Nov. 20. This special issue will be mailed to all members on Dec. 1, 1982 in order to give you time to enjoy it and to take advantage of the many special bargains being offered by our advertisers.

Finally, while you are taking time to give thanks in your own personal way, be thankful of what you have, your good health, and your friends and family. There is much more to life than what we normally think about in our daily activities.

Have a good holiday!

Arthur Leyenberger

JACG NEWSLETTER

The Jersey Atari Computer Group Newsletter will accept advertising on a first-come and space-available basis. Camera ready copy accompanied by payment must reach the Editor by the 20th day of the month preceding publication. JACG reserves the right to make decisions concerning placement of ads within the Newsletter.

Advertising Rates

a) Full Page 7-1/2 x 9 ... $40.00
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Annual rates available upon request.

1982-1983 MEETING SCHEDULE

All meetings are held on the second Saturday of each month in the Bell Labs Auditorium, Murray Hill, New Jersey. The meetings begin promptly at 10:00 a.m. and end around noon.

Dec 11, 1982
Jan. 8, 1983
Feb. 12, 1982
March 12, 1983
April 9, 1983
May 14, 1983
June 11, 1983
July 9, 1983
Aug. 13, 1983

AND NOW A WORD FROM THE PRESIDENT....

Our October meeting was very well attended, with more than 200 present. We had quite a good program featuring an excellent talk on PILOT by Curt Springstead. This sounds like an extremely good language to use as an introduction to computers, especially for children. One line of Curt's that will stick with me is his comment that it is not computer literacy that we need to teach, but rather the logical thought that goes into good programming, since any particular computer is bound to be superceded eventually.

It was also an extremely good day for demos. For those of you who couldn't be there, drool over this list of goodies that we saw: CHOPLIFTER, FROGGER, BANDITS, SNEAKERS, PROTECTOR II, PICNIC PARANOIA, FRENZY & FLIPTOP AND MASTER TYPE. Most of them were shown by our editor, Art Leyenberger, in his usual entertaining way. I must admit that I especially liked PICNIC PARANOIA and the learn-to-type program MASTER TYPE. Of course, I also liked FROGGER and CHOPLIFTER and BANDITS and .....

Then we finished up with a demo of BASIC COMMANDER, a very nice looking set of utilities, which was described by one of its authors, Mark Chasin of MMG Micro Software.

We were disappointed at the absence of Fernando Hererra from the meeting. We were looking forward to seeing his new ASTRO CHASE. However, we sympathize with his rush to get the product ready. I understand that he found an extra 8K of space and wants to fill it with some nice introductory graphics. We hope to see him in November.

In the department of Atari news:
1. Atari is working on a full-blown edition of LOGO.
2. Signalman modems seem to have some problems. Members were either very pleased with these modems or else had been through several. The problem may be due to inability to cope with noise in telephone lines that more expensive modems can handle.
3. An Okidata printer (Model ?) will be the regular Atari printer, replacing the Centronics printer currently being supplied.
4. Epson has a new series of printers coming out (Model FT82?), with 160 cps. One report is that Epson will then drop the MX-80 series, including support for printers in the field. I find that part hard to believe, even if, like the Maytag repairman, Epson servicemen are lonely due to the reliability of their printers.
5. The new 810 disk drives, with the analog boards, will not write on disks formatted with older drives.
6. Atari 800's are now offered with a full 48K of memory at the old 16K price. Take that, Commodore!

For your future calendar, note that in February we will have a demonstration by the New York Times of their new database system for personal computers.

Also note that we have, courtesy of Atari, an irresistible incentive for writing newsletter articles or programs. As long as the supply lasts, you can have your choice of a large, full color poster (Centipedes, Caverns of Mars or PacMan) or an "I'm Atari Compatible" button for any contribution one half page or more in length. Amaze your friends! Impress your boss! Be the envy of the neighborhood!!

Atari stuff that has recently arrived in the mail...
1. A new hardware/software catalog from Dataware, Inc. of Hollywood, CA. El cheapo paper and mostly Apple stuff; Atari items seem reasonably priced.
2. Software Pro of Sunnyvale, CA wants to publish your software. They will evaluate your work for ONLY $49.95 of your money! How big of them!
3. CNGA of Columbus, OH will sell you insurance for your hardware and software (sample policy enclosed).
4. Vervan of Cucamonga, CA has five utility programs available ($25-40). (And you thought there was no Cucamonga.)

5. Microtronics, Inc. of Ft. Collins, CO will have a real keyboard for the 400 in December ($129.95).
6. Atari (you've heard of them?) will sell you t-shirts, sweatshirts, jackets, etc. with appropriate emblems ($5-20).
7. T.H.E.S.I.S. of Garden City, MI has a book out on Atari Programming ($12 for paperback).

I am instituting two meeting changes, effective with the December meeting. Computer merchandise sales will be restricted to the period from 9:15 to 10:00 before the meeting starts. In addition, we will have a question and answer period from 9:30 to 10:00 before each meeting. The intent here is to get people to come to the meetings on time and to get people cleared out after the meeting ends so that the officers can go home!

Dick Kushner — JACG President

The Secretary's Report

The request is out for a brave soul to help our club as the TAPE Librarian. If you feel the club should do more, you should help. The dues pay for postage ,printing, etc. only.

Don Ursem gave a good run down on the state of our disk collection and we are getting better all the time.

The President, Dick Kushner, made the anouncements about elections and the vote will be held at the Nov. meeting.

There was a lively discussions on the merits of various modems . It appears that there is a need for some interested party to do a full blown report on this very important part of home computing. At the Feb. 1983 meeting there will be rep's from the N.Y.TIMES to give a demo of their new personal computer access service.

In an article in the Wall Street Journal Oct.20,1982 Warner Communications reported th revenues are 1.03 BILLION for 1982. The home computer group had QUADRUPLED it's sales!!!

The choice of a ATARI has born fruit. It now appears that a good product and great ads can stop the tide and make ATARI a very formidable home computer. There are many things that belong in this article but you'll get the hi-tech from the real experts in the club.

That's it for this month.
Ed Picciuti
Secretary — JACG

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printer ribbons----and anything else you want- well almost anything

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AT A TURTLE'S PACE with Atari PILOT
by Curt Springstead - JACG

    After my presentation last month many of you had
questions concerning Atari PILOT and its use in
schools and homes for teaching computing.   Most of
you asked the same question, how do I get started?
For the next couple of months I will try to help you
develop a plan of attack for the use of PILOT to meet
your education goals. I will also pass along some
tips and techniques that I have either developed or
have gotten from other sources.
    This month let's start with a list of sources
for you PILOT users. I have personaly used all of
these and have not been disappointed by any of them.

        ANTIC Magazine
        297 Missouri Street
        San Francisco, CA 94107
        $15/year (6 issues)

        Compute! Magazine
        515 Abbott Drive
        Bromall, PA 19008
        $20/year (12 issues)

        ACE Newsletter
        3662 Vine Maple Drive
        Eugene, OR 97405
        $10/year (10 issues)

    The following organizations produce newsletters
primarily on the use of LOGO and PILOT in schools as
well as supporting the spread of these languages in a
"political" sense.

        Young Peoples LOGO Association
        1208 Hillsdale Drive
        Richardson, TX 75081

        Friends of the TURTLE
        P.O. Box 1317
        Los Altos, CA 94022

    The first step in teaching someone about
computing using PILOT or any other language is to get
them to sit down at the machine in the first place.
You think it would be wonderful for the wife to learn
the ATARI so she can help the kids with the computer
when you are out earning the daily bread.   Does she
think that too? No? Are you using the right bait?
    "Dear, wouldn't it be wonderful to use the ATARI
to help you balance the checkbook?" (careful if you
used this one to buy the machine two years ago it may

backfire).   ·
    To which she replies, "If I wanted the checkbook
balanced I would have you do it DEARRR".
    First rule of education - know your audience.
Find something in your prospective students life that
your little electronic marvel can do or make easier.
If that doesn't work try guilt.
    Have little Reginald III ask, "Mommy can you
help me with my regression analysis program for
school tomorrow."
    "What do you mean you can't program?   Billy's
mom can, yup the blonde lady in the tennis dress."

```
***************************
     BASEBALL STATS
 By George Hamilton - JACG
***************************
```

        This is a baseball game record for anyone that
likes to make copies of each game. The first part is
loaded by normal D:BASEBALL.BAS.   The second part
will be loaded at the end. If you are going to enter
the new stats when the baseball is loaded then list
and break. When the game data comes to the screen
enter the new numbers in the same location as the
existing data. Location of data is important for
print alignment.
        It's ok to change the name of the team after the
games are out of the way.   Then list and get the
player data on the screen. Use the edit keys to
change one set of games figures to the next.   Run the
program and your printer will do the rest.   Remember,
after the run you have loaded pitching stat program
and need to reload baseball program to correct errors.
        I suggest that you keep each game by number e.g.
D:BASEBALL.ONE for the first game and D:PITCH.ONE for
the pitching stats. Remember to change the last line
to LOAD D:PITCH.ONE.
        Running a games totals file concurrently is now
not possible but I am going to start working on it.

```
5 PRINT "BY (GLH)GEORGE HAMILTON 7/82"
10 REM "THIS IS A BASEBALL TEAM' SET OF RECORDS FOR
INDIVIDUAL GAMES."
15 POKE 195,0
30 REM "FOR TOTALS TO DATE YOU MUST ADD THEM ON THE
SIDE BUT MAY USE THE FORM AND DATA STATEMENTS"
50 REM "TO RUN THEM ON THE PRINTER AND COMPUTE AVE
ETC."
70 PRINT :LPRINT
90 REM "ONCE THE PLAYERS NAME IS INTERED ONLY THE NEW
NUMBERS NEED BE ENTERED FOR EACH GAME IN THE SAME "
110 REM "PLACE 'THE FORMAT IS IMPORTANT'."
130 REM " IF ERRORS ARE MADE DURING ENTRY THEN JUST
TYPE THE CORRECT ENTRY USING NORMAL EDIT THEN RUN
AGAIN"
150 REM " AP=AT PLATE;WK=WALKS;SC=SACRIFICE;SO=STRIKE
OUT;S=SINGLE;D=DOUBLE;TR=TRIPPLE;H=HOMERUN;R=RUNS"
170 REM " RB=RUNS BATTED IN;E=ERROR;AB=TOTAL AT
BATS;HT=TOTAL HITS;AVG=BATTING AVERAGE"
190 REM " LIST 470 AND ENTER DATA FOR
GAMES;WON,LOST,TIED. FOUR ENTRIES REQUIRED,PERCENT
WILL BE COMPUTED"
210 REM " LIST 400 OR JUST LIST AND WHEN 400 IS TO
TOP OF SCREEN HIT BREAK KEY THEN ENTER DATA WITH
EDITING"
230 REM " THE FIRST ',' IN THE DATA LINE IS THE THIRD
PRESS OF THE TAB KEY "
250 REM " PITCHING STATS ARE LOADED SEFERATELY AT END
IF PLAYER STATS"
270 LPRINT " AP=AT PLATE; WK=WALKS; SC=SACRIFICE;
SO=STRIKE OUT; S=SINGLE; D=DOUBLE; TR=TRIPPLE";"
"; "H=HOMERUN"
290 LPRINT " R=RUNS;RB=RUNS BATTED
IN;E=ERROR;AB=TOTAL AT BATS;HT=TOTAL HITS;AVG=BATTING
AVERAGE"
310 LPRINT "                    YANKEES"
330 DIM P$(15)
350 LPRINT
370 LPRINT
390 POKE 201,10
410 LPRINT "GAMES","WON","LOST","TIED","PRECENT"
430 LPRINT                 .
450 LPRINT
470 DATA 2,1,1,0
490 READ G,W,L,T
510 AVT=INT((W/G)*1000+0.5)
530 LPRINT G,W,L,T,AVT
550 LPRINT
```

```
570 LPRINT
590 LPRINT "                    PLAYER STATS.    "
610 LPRINT
630 LPRINT
650 LPRINT
670 POKE 201,4
690 LPRINT "PLAYER NAME    ", "AP", "WK", "SC", "SO",
"S", "D", "TR", "H", "R", "RB", "E", "AB", "HT", "AVG"
710 DATA JONES      ,4,0,1,1,2,0,0,0,2,1,0
730 DATA HARMOND    ,3,1,0,0,1,1,0,0,0,1,0
750 DATA LINCLON    ,3,1,1,0,0,1,0,0,0,1,1
770 DATA HENRY      ,4,0,0,1,1,1,1,0,0,0,1
790 DATA MARTIN     ,4,1,0,0,2,1,0,0,1,0,0
810 DATA COLLINS    ,4,0,1,1,2,0,0,0,0,1,0
830 DATA JOHNSON    ,4,0,0,0,3,1,0,0,1,1,0
850 DATA HATFY      ,3,0,0,0,2,1,0,1,1,2,0
870 DATA BOOB       ,3,1,0,2,0,0,0,0,0,0,1
890 DATA NUTTZY     ,3,0,1,0,2,0,0,0,0,0,0
910 DATA POOLIN     ,3,1,1,1,0,0,0,0,0,0,0
930 DATA DODGE      ,4,0,1,1,2,0,0,0,0,0,0
950 DATA CRAIG      ,3,0,0,0,2,1,0,0,1,1,0
970 DATA SMITH      ,4,1,0,1,1,0,0,0,0,0,0
990 DATA ACHING     ,3,0,0,0,2,0,0,0,1,0,0
1010 DATA HURTING   ,4,0,0,0,1,0,0,0,0,0,0
1030 LPRINT
1050 TRAP 1190
1070 READ F$,AP,WK,SC,SO,S,D,TR,H,R,RBI,E
1090 ATB=AP-(WK+SC)
1110 HT=S+D+TR+H
1130 IF HT=0 THEN AVG=0:GOTO 1170
1150 AVG=INT((HT/ATB)*1000+0.5)
1170 LPRINT F$,AP,WK,SC,SO,S,D,TR,H,R,RBI,E,ATB,HT,AVG
1190 IF PEEK(195)<>6 THEN GOTO 1070
1210 PRINT "ERROR   ";PEEK(195):PRINT "  LINE
";PEEK(186)+(256*PEEK(187))
1230 LPRINT
1250 POKE 195,0
1270 LPRINT
1290 PRINT "STAND BY LOADING PITCHING  STATS"
1310 LOAD "D:PITCH.BAS"


10 DIM P$(15)
20 LPRINT " I = INNINGS; BT= BATTERS; SO= STRIKE OUTS;
ER= EARNED RUNS; UR= UNEARNED RUNS "
40 LPRINT " P= PASS BALL; WP= WILD PITCH; WN= WON;
LS= LOST; SA= SAVED; ERA=EARN RUN          AVERAGE"
60 POKE 195,0
80 POKE 201,4
100 LPRINT
120 LPRINT
140 LPRINT "                 PITCHING STATS
"
160 LPRINT
180 LPRINT
200 LPRINT "PLAYER NAME", "I", "BT", "SO", "ER",
"UR", "P", "WP", "WN", "LS", "SA", "ERA"
220 LPRINT
240 LPRINT
260 DATA SMITH       ,65,9,4,7,1,1,3,1,2,1,1
280 DATA ACHING      ,0,0,0,0,0,0,0,0,0,0,0,0
300 DATA HURTING     ,32,9,3,5,8,1,1,3,2,1,1
320 TRAP 420
340 READ F$,I,BT,SO,ER,UR,P,WP,WN,LS,SA,ERA
360 IF I=0 THEN ERA=0:GOTO 400
380 ERA=INT((ER/(I/9)+5.0E-03)*1000)/1000
400 LPRINT F$,I,BT,SO,ER,UR,P,WP,WN,LS,SA,ERA
420 IF PEEK(195)<>6 THEN GOTO 340
440 PRINT "ERROR #";PEEK(195):PRINT "LINE #
";256*PEEK(187)+PEEK(186)
460 LPRINT
480 LPRINT "FINISHED"
500 PRINT "PLEASE STAND BY LOADING BASEBALL STATS.
FOR ANOTHER PRINT RUN"
520 LPRINT
540 PRINT ↑;↑,↑:REM THIS RINGS BELL [(ESC\CONT 2)=↑
]
560 PRINT " PLEASE RESET PAPER "
600 LOAD "D:BASEBALL.BAS"
```

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PICK UP RULES/ENTRY FORM AT *Earthrise*

Getting your children to the console may require cash bribes or, at the very least, a couple of uninterupted hours of playing PAC-MAN. Assuming you found a method of winning their heart, you are ready for lesson one. Have them sit at the computer because it is not much fun watching someone else program. Let them play with various small bits of the job they want to do, the graphic layout or a key part of the calculation. This not only lets them get something going right away but also secretly starts them thinking in a modular way, or using the building block concept. Let the project develop from there to completion. Act as an advisor to the neophyte, answer questions when asked and resist the temptation to say "Here, let me show you a neat little trick", because the trick may be the way they disappear.

Your assignment for next month is to find a willing subject. If you can't find anybody, YOU will have to do.

I would like to have those of you interested in PILOT contact me at the meeting or call me at (201) 839-1702, so that we can start the PILOT special interst group in motion and find out what the needs of the group are.

Until next month.
E:
RUN

FAST CHIP SPEED TEST
By Berne Stober - JACG

One of my main reasons for getting a home computer was the possibility rf using it in my engineering work. Of course, that wasn't the only reason, with things like home financial management, record keeping, education, and naturally, games being so readily available. Because of these other considerations, I looked for something that could do more than just solve equations. (Star Raiders sold me on the Atari, I couldn't find another computer that could play a similar game.)

After three months of playing Star Raiders and numerous other games and learning the PEEKS and POKES of the Atari, I got down to doing some serious work on the machine. I wrote a short program that solved a nonlinear equation with an exponential term. The program took FOREVER to run. At this point I was thinking "well, so much for using the Atari to do engineering calculations." It was at about this point that the availability of the fast chip was announced. I promptly ordered one. It finally came and before installing it I decided to do some speed comparisons between the old chip and the new.

My testing took two avenues, first check accuracy to see that it had not been sacrificed for speed; and second, check speed using a simple FOR/NEXT loop with various floating point functions inserted. I did all the tests on the old Atari FFP (Floating Point Package) first, then installed the fast chip and repeated them. The FOR/NEXT loop was set to execute 1000 times, which seemed to give reasonable execution times. All the timing was done using a digital stopwatch (Anybody know how the machine could have done it?).

The following table gives the results of the speed tests. If a difference in calculated values was noted, a Y appears under ACCURACY. In most cases, the differences were in the last decimal, different by one. In one case (X=3^2), the fast chip is more accurate, yielding 9.00000001 vs. 8.99999988 for the Atari FFP. As an engineer, I'm not too concerned about the minor accuracy differences, after all, only 15 years ago the slide rule was the most common calculating device in my profession. The BASIC program used to test the speed was:

```
10 FOR I=1 TO 1000:(expression):NEXT I
20 END
```

EXPRESSION	ATARI FFP	FAST CHIP	ACCURACY
X=ATN(5)	2:01	:56	same
X=CLOG(5)	2:10	:34.4	Y
X=COS(5)	1:26	:34.6	same
X=EXP(5)	1:52	:29.4	same
X=INT(148.41316)	:04.9	:04.6	-
X=LOG(5)	2:20	:37.3	Y
X=SIN(5)	1:23	:38.3	same
X=SQR(5)	2:15	:56.2	same
X=3^2	4:03	:55	Y
Loop Only	:02.3	:02.1	-
X=10.5892346/2	:14.3	:08.5	same
X=10.589235+ 10.589235	:05.3	:05.0	same
X=10.589235- .4781235	:05.3	:05.0	same
X=10.5892346	:04.0	:03.9	-

Some quick conclusions from this table. First, if you expect the fast chip to dramatically speed up BASIC programs with only FOR/NEXT loops, addition and subtraction, forget it. Second, the time savings for higher functions are remarkable and totally as advertised. To see what these saving would translate to in an actual engineering calculation, I ran one more test. It was a numerical integration of the equation: $y''-.1*(1-y^2)*y' + y=0$ over 50 steps with a step size of 0.2. The initial conditions were $t=0$, $y(0)=1$, and $y'(0)=0$. My own BASIC version of the Runge-Kutta algorithm was used. With the Atari FFP, this problem took 1 min 24 sec to solve. With the fast chip, the solution took only 46 sec. I expect to get even graeter time savings with some current work where I'm integrating 6 equations with numerous exponential terms.

PREPPIE
By Adventure International
Cassette [16k] $29.95
Disk [32k] $29.95
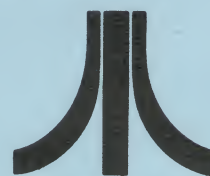Reviewed by Vincent T. Murphy - JACG

This is an arcade-quality game that has excellent sound and graphics. The screen is divided horizontally in half with the lower portion representing a golf course green and the top half representing a river. In the center of the screen is an island. The green has golf carts, lawn mowers and tractors that move at various speeds across the screen. The object of the game is to scurry around the screen retrieving golf balls without being run over by a vehicle or landing in the river. The river is filled with canoes and logs that move and the player must leap frog across them in order to retrieve golf balls on the other side of the river. At the higher skill levels, alligators lurk in the waters and a giant frog must be dodged when the preppie is on the island.

The game starts off with 3 preppies (you can tell they are preppies because of the Bermuda shorts, Lacoste T-shirts, and Top siders) and from one to three golf balls. One golf ball is on the green and the other golf balls are across the river. To maneuver your preppie through all of the hazards and retrieve the golf balls to the bottom of the green is quite a challenge in this graphics extravaganza.

Preppie is a state-of-the-art game written in machine language which uses twenty eight colors for the display. It also plays several different songs throughout the game as the action takes place on the screen. One or two players can play and joysticks are required.

The Voice Box By The Alien Group
Reviewed by Arthur Leyenberger - JACG

"PLEASE TEACH ME TO SPEAK!" were the words that
came from the speaker in my TV set, on the screen
were printed the words themselves, and my Atari was
speaking to me. The above description is not the
lead sentence from Isaac Asimov's sequel to the
Foundation Trilogy but is what happened after I
connected the Voice Box to the serial port of my
Atari and booted up the disk containing the programs.
At this point I typed: "ATARI" and pressed the return
key. What I heard sounded something like
"uhtareeee". Since I had broken with tradition (my
own), and first read the manual, I knew that the
Voice Box would pronounce whatever was typed on the
screen - literally. I also knew that words could be
spelled phonetically to improve the pronounciation.
So, I then typed: "AHTARY", pressed the return key
and out came the name of the computer that we all are
familiar with.

The box itself measures 3" x 4" x 1-1/2" with a
large knob on one side and a cable terminated with a
serial port connector. It must attach last in the
daisy chain, where the cassette recorder is usually
connected. Because of this, programs read from a
cassette must be loaded first before the Voice Box is
hooked up. Turning the knob changes both the pitch
and the speed of the utterances. No external power
is required and the sound is routed through the
television speaker.

The Voice Box disk contains 3 dictionaries, 16k
and 32k versions of the BASIC program, a
stripped-down version of the program which can be
merged with other BASIC programs and an object code
version of the phoneme pronouncer. New words or
portions of words may be saved by typing the spelling
variation, an equal sign, and the phonetic spelling.

The 32k version has a "talking face" whose lips
are synchronized to the pronounced syllables. The
low-res drawing is crude but the effect is
impressive. The BASIC program also incorporates a
random sentence recitor which uses the built-in
vocabulary (or one of your own). To the novice, this
feature is interesting and it is a great way to show
off synthesized speech, especially when combined with
the talking face. However, I soon found the random
sentence option to be boring.

There are two pronounciation and one spelling
dictionaries. The first dictionary is to be used
with the 16k version and the others with the larger
version. The spelling dictionary spells out the
input strings. Dictionaries contain strings of
symbols that translate the hex phoneme codes to the
Voice Box itself. The user-made dictionaries may

also be saved for later use with either the Voice Box
main program or with a user-written program.

An especially nice feature of the Voice Box
program is the menu that is presented when the
program is first booted or in response to typing
"*M". Menu options include: listing the vowel
phonemes, listing the consonant phonemes, the talking
face, saving a dictionary, seeing a dictionary,
slowing down or speeding up speech and producing
random sentences.

Although the synthesized speech produced by the
Voice Box will never be mistaken for a human voice,
its quality and understandability are better than
most synthesizers that currently exist. The
potential for this type of peripheral is amazing.
Voice output could reinforce screen information for
tutorial programs, games could be enhanced and
applications for handicapped people may be possible.

The retail price of the Voice Box is $169.00, it
requires BASIC, and is available on either tape (16k)
or disk (16k or 32k).

SPECIAL INTEREST GROUPS
List of leaders

At the July meeting, special interest group
sign-up sheets were posted in the lobby of the
auditorium. This was also done at the September
meeting. The following is a list of people who
volunteered to act as a leader for each of the
groups. Their phone numbers are given to facilitate
the activities of the groups.

	PASCAL
Ben Eng	(201) 773-0122
	PILOT
Nelson Piueda	(201) 549-4122
	GRAPHICS
Dick Shields	(201) 494-7945
	TELECOMMUNICATIONS
Bob Reeves	(201) 689-0291
	FORTH
Curtis Springstead	
	(201) 839-1702
	ASSEMBLY LANGUAGE
Dick Shields	(201) 494-7945
	BASIC
Only one	(???) ???-#$%&
	EDUCATION
No Body	(000) 000-0000
	GAME CONSTRUCTION
No One	(000) 000-0000

Ergo What?
Reprinted from the Consumer Products Technical Group
of the Human Factors Society
Vol 7 No 3, Sept. 1982

In the old days, if a boss saw a worker with his
feet propped up on the desk, he would probably furrow
his brow and bark, "Don't get too comfortable,
Bumstead!". Times change. Today's executive might
buy the employee a more comfortable chair. The
manager would be applying one of the latest buzzwords
in American Business: ergonomics. Says Michael J.
Smith, chief of motivation and stress research for
the National Institute for Occupational Safety and
Health (NIOSH): "There isn't one major computer maker
or office-furniture maker that doesn't have ergonomic
experts designing the equipment."

The term comes from the Greek words for work
(ergon) and law (nomos). It means designing tools
and products for the ways in which people move and
think, rather than forcing people to adapt to them.
The intent is to reduce eyestrain, backaches and
muscle cramps on the job.

IBM is a major mover behind ergonomics. The
firm has developed a line of furniture with pneumatic
mechanisms that adjust backs and seats, a
five-pronged chair base that prevents tipping, and
molded backs that conform to the body.

Comfortable furniture seems to pay off. A study
by Smith's group showed that operators at computer
terminals are about 25% more productive when they use
ergonomic furniture instead of the conventional
variety. At last there is a place in business for
the truly laid back.

```
###################################
#        J A C G              #
#  JERSEY ATARI COMPUTER GROUP    #
#        58 DEWEY AVENUE          #
# HIGH BRIDGE, NEW JERSEY 08829 #
###################################
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FIRST CLASS MAIL

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